



WELCOME TO THE PRI TRAINING NEWSLETTER

The newsletter is released quarterly and features technical and other articles of interest.



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December 2019

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2019 - A Year in Review

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Onsite Training Experience

SKF UK Ltd's Special and Common Processes Manager shares their experience of onsite training



Training at the Nadcap Meeting in Beijing

In February 2020, we are running training at the Nadcap Meeting in Beijing, China



New PRI Training Website

As part of our rebrand, we launched an updated website in October 2019 - if you haven't seen it yet, here's what you've missed



New Webinars in 2020

The perfect opportunity to receive training right from your desk



Meet the Instructor

Thomas Rucker talks about being a PRI Training instructor

2019 - A Year in Review

We have a new name: PRI Training!

As part of PRI's new branding strategy, we have transitioned from eQualLearn to PRI Training. We are very excited to start this new chapter, continually striving to deliver our courses with the same high-quality content as you have enjoyed so far. We have updated our logo, as well as changed our email address, website, and LinkedIn:

- PRI-Training@p-r-i.org
- www.PRI-Training.com
- [PRI Training on LinkedIn](#)

LinkedIn

The PRI Training LinkedIn page shares technical articles, training opportunities, tips to prepare you for Nadcap audits and course discounts. Our LinkedIn page is growing every day and we now have more than 400 followers. Join our LinkedIn community and Contact us on directly to let us know topics you would like us to share – you can also send suggestion by email here PRI-Training@p-r-i.org.



PRI Training courses in 2019

PRI Training strives to offer excellent training to the aerospace industry around the world. In 2019, PRI Training delivered more than 300 courses to

over 3,600 learners in 24 countries. 43.5% of public classes were offered in local languages, such as French, German, Spanish, Mandarin, Korean and Japanese.

[Introduction to Pyrometry](#) remains our most popular course, with sold out sessions in Munich, Germany and Torrance, CA, USA, and in Sheffield and Bristol, UK. A quote from one of our participants stated that our Introduction to Pyrometry is “a great course that should be required for any position involved with Nadcap Heat Treating/Pyrometry”.

Visit the [PRI Training website](#) for a complete list of all training courses and locations.

Training at Nadcap Meetings

PRI Training is continually supporting the Nadcap community by offering training at each [Nadcap Meeting](#).

PRI Training courses were available at all three 2019 Nadcap Meetings, and more than 600 attendees took advantage of these opportunities.

A new Chemical Processing Open Discussion Forum was held in New Orleans, USA, and Paris, France, with presentations given by Staff Engineers, Nadcap Auditors and PRI Training Instructors. Subscribing Voting Members of the Chemical Processing Task Group were also available to answer Suppliers' questions.

Eight PRI Training courses were offered at the October 2019 Pittsburgh Nadcap Meeting including the highly anticipated [Nadcap & Quality for Quality Engineers](#) course taught by the Course Developer & PRI Training Instructor, Guy Levasseur.

A participant stated that it is an “Introduction level course that includes tips to help your organization create a robust QMS and successfully prepare for Nadcap.” The Nadcap & Quality for Quality

Engineers course will be available in Torrance, CA, USA, and Troy, MI, USA, in 2020.

Customized Learning

In 2019, PRI Training offered tailored [onsite training](#) to more than 45 companies in 18 countries covering Americas, Europe and Asia. Onsite training provides the ability to have training directly at your company, with multiple benefits such as a costs savings on time, travel and customized content.

PRI Training offers companies the ability to host courses at their facility. This is a great solution for a company to train employees minimizing the cost. In 2019, PRI Training delivered more than 15 hosted training sessions, with mostly companies that have previously hosted with us before. Gain insight from

the interview we conducted with hosting company PK Labs in Israel in our [December 2018 newsletter](#). [Contact a PRI Training team member](#) to learn more about onsite and hosting training options.

Learning Packages

PRI Training Learning Packages were launched this year. They were designed to offer cost savings on [webinar](#) registrations.

Learning Packages include three different options that can be purchased by either an individual or a company: Essentials (3 webinar registrations), Plus (6 webinar registrations), and Premium (12 webinar registrations). Additional discounts for public courses in your area can be added on to the webinar packages. All 2-3-hour webinars are available as part of the packages.

Learning Packages	Essentials	Plus	Premium
Webinars	3	6	12
Public Sessions (Customize Learning Path)	Any 2	Any 4	Any 8
Learning Package Cost	\$500 + Learning Path Option(s)	\$950 + Learning Path Option(s)	\$1,950 + Learning Path Option(s)
Potential Cost Savings	Up to \$350	Up to \$998	Up to \$1,946

Learning Path Option(s) (Public Sessions)	Essentials (Select 2)	Plus (Select 4)	Premium (Select 8)
Quality	\$450	\$425	\$425
Nadcap Audit Criteria Review	\$495	\$465	\$465
Nadcap Audit Preparation	\$675	\$635	\$635
Introduction to Pyrometry	\$899	\$849	\$849
Special Process	\$720 - 1,125	\$680 - 1,063	\$680 - 1,063

Nadcap Chemical Processing Audit Nonconformances

WHERE DO THEY ALL COME FROM?

The AC7108 Rev. I - Audit Criteria for Chemical Processing is the core checklist used during a Chemical Processing audit covering quality, planning, general laboratory testing, and process equipment control and maintenance. Most non-conformances (NCRs) are found while performing a job audit. All Nadcap Task Groups review their most common NCRs and publish them in eAuditNet yearly. These reports are a useful tool for Suppliers when preparing for an upcoming Nadcap audit.

This article highlights the top five NCRs that are commonly raised during Chemical Processing audits and tries to explain how to prevent these occurrences.

The most reported NCRs against the AC7108 Rev I checklist

The chart to the right shows the number of NCR's (occurrences) for Chemical Processing according to paragraph number within the Checklist. This chart highlights three areas of concern.

Firstly, the chart emphasizes operator error, such as, the Operator doing something they are not instructed to do or doing

something different than what was instructed to do (Question 3.6.5).

Secondly, failing to flow down to the shop floor the specification or purchase order requirements. This can be related to processing, inspection or solution control (Question 3.8.1).

Thirdly, lack of calibration control. Using uncalibrated instruments or using calibrated instruments outside their controlled range (Questions 3.14.1.1 & 3.14.1.2).

Now, let us take a deeper look at the first five of these top 10 NCRs in turn and I shall give you some examples of what was observed

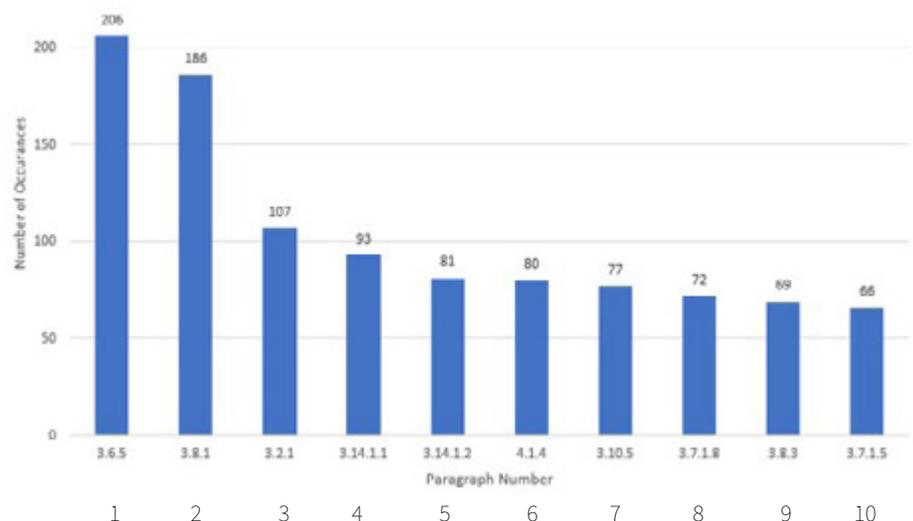
by the Nadcap Auditor.

NCR 1: Question 3.6.5 Have operations/tasks that affect conformity to chemical process requirements (e.g. planning, processing, inspection) been carried out correctly?

This is the process/inspection/planning that has been defined within the internal procedure, but the requirement was not properly followed or flowed down correctly.

This can also be an internal procedure followed above the chemical processing requirements even if it does not match them adequately.

AC7108 Rev. I - Audit Criteria for Chemical Processing (2018)



Examples of findings

- “Technical Data Sheet requires that the activator/hardener be added to the base while continuously mixing, the internal procedure states the same. Operator added the activator/hardener to the base, and then began mixing.”
- “Internal procedure requires all test panels are placed at 15° to 30° to the vertical when undergoing salt spray testing per ASTM B 117. Parts were processed to MIL-A-8625 which requires test panels to be at 6° to the vertical. Records show that all panels are placed at 15° to 30° to the vertical.”
- “When changing electrical contact points after first etch operation, the parts are handled in such a way that contamination of the surface can occur.”

It is imperative that your internal audit system acknowledges the requirements you are working with and does not explicitly contradict them when workers are carrying out a job. Regular audits or inspections help to ensure employees are following processes correctly.

NCR 2: Question 3.8.1 Is there a procedure defining system/requirements for process and quality planning which effectively ensures compliance with customer and/or specification requirements?

If you received an NCR for this question, you either do not have a procedure in place or it is incorrect in defining the process to the requirements. In other words, the specification requirement is not properly flowed down which leads to errors.

Examples of findings:

- “Customer Specification specifies unsealed anodize when testing for anodic coating weight, but internal procedure specifies sealed anodize when testing for anodic coating weight.”
- “Customer specification requires cold water rinse for a minimum of two minutes after alkaline degrease, the Auditee’s procedure requires water rinses for 30 seconds after

alkaline degreasing operation.”

- “ASTM B117-16 requires that specific gravity 1.024-1.037 at 25 C for 5+ _1% by weight solution. Internal procedure requires specific gravity between 1.025-1.040 for the collected solution.”

It is particularly important to clearly state procedures and compare them with official requirements (Audit Criteria, specifications, etc.) to ensure there are not any misunderstandings or contradictions. This is similar to the first top NCR indicating that this is a recurring issue in audits and something you should pay close attention to while preparing for yours.

NCR 3: Question 3.2.1 Did the Auditee make a copy of their completed self-audit, and other documents listed in 2.1.3, available to the auditor at least 30 days prior to the audit- utilizing the version of the checklist(s) applicable to this audit?

A self-audit must be completed ahead of the Nadcap audit, and all documentation linked to this must be uploaded into eAuditNet no later than thirty days prior to the actual audit, though ideally this should be done with time to spare.

Examples of findings:

- “Auditee submitted self-audit 29 days before the start of the audit.”
- “Self-audit was submitted prior to the 30 days, but only AC7108/1 was completed and AC7108 and AC7108/4 were not uploaded.”
- “The completed AC7108 Rev. I did not identify where the means of compliance or evidence of compliance may be found. For example, Auditee answered “YES” to AC7108 Rev. I, 3.6.1 but no applicable internal procedure was identified to provide evidence of compliance to this checklist question.”

Your self-audit should mirror your upcoming audit: cover the same Audit Criteria and slashes with the same documentation to guarantee that you are not missing any requirements. Every question you answer “YES” to must be accompanied with proof

for that positive answer.

NCR 4: Question 3.14.1.1 Is there evidence of current calibration/verification for: all shop equipment used to set, control or monitor the control of a process?

Are you sure all the equipment used for processing of hardware is calibrated, and correctly calibrated? This includes (and not limited to) rectifiers, temperature controllers, timers, pressure gauges.

Examples of findings:

- “The temperature controller for drying station on the anodizing line is not calibrated.”
- “No evidence that the air pressure gauge on the blast cabinet used for stripping paint has been entered into the Auditee’s calibration system.”
- “The scale used to weigh out dry chemical additions to process tanks was passed due date to be re-calibrated.”

Calibration of your equipment should be inspected and verified against the chemical processing requirements of the Audit Criteria you are working against.

NCR 5: Question 3.14.1.2 Is there evidence of current calibration/verification for: all test and inspection equipment, including measurement standards, used to accept product or control a process?

Ensure that all equipment used for testing and inspection is fully calibrated: thickness gages, thickness foils, rollers, magnifiers, timers, hardness testers, rectifiers, Zahn cups, 3M Tape, etc.

Examples of findings:

- Using an uncalibrated timing device to monitor a timed test (adhesion, wbf, etc).
- “The Inspector checked the copper plating thickness of the parts with an uncalibrated thickness meter.”

- “There was no evidence of current calibration of the auto titrator.”
- “The roller used for wet adhesion testing of painted parts is not calibrated for toleranced parameters.”

Testing and inspection equipment need to be verified for calibration for them to provide reliable information. This will be checked by the Auditor, so record of calibration needs to be available as well.

The top 10 NCRs for Chemical Processing can be found in eAuditNet at: Resources / Public Documents /Task Groups /Chemical Processing/ CP- Top NCR 2018. The remaining five top NCRs will be addressed in the March 2020 PRI Training newsletter.

Upcoming Chemical Processing courses in 2020 can be found on the PRI Training website:

[Nadcap Audit Preparation – Chemical Processing](#)

[Nadcap Audit Criteria Review – Chemical Processing](#)



Article written by
Neil Cowan
Nadcap Auditor and
PRI Training
Instructor

Onsite Training Experience

SKF UK Limited – Stonehouse is a United Kingdom based aerospace company that has utilized PRI Training as their training provider for 10 years. SKF employees have regularly attended both onsite and public sessions. Liam Gardner, Special and Common Processes Manager, shares his experience about the PRI Training onsite sessions held at SKF UK Limited- Stonehouse’s facility in 2019.



“We have 184 employees at SKF UK Limited – Stonehouse, who have made it possible to hold Nadcap Accreditation for Critical Processes in Heat Treatment, Chemical Processing and Non-Destructive Testing. We first learned about PRI Training through a Nadcap Auditor and we got in touch with the team directly to organize training for our employees. We heard about the training options PRI Training offers, public courses, onsite trainings, webinars... Some employees were sent on public courses or webinars when we had an ad-hoc training need for a few people.

“However, when we needed to train more than five people at once, we were advised that onsite training might be the best option. We viewed this as an opportunity to save money and time by having an industry expert come to our facility to share their knowledge and experience directly with the workforce. The PRI Training team was able to advise us on what training courses were advantageous for different scopes of approval. We were also able to tailor content exactly to the scope of relevant audits to SKF, which will have a positive impact on future Nadcap audits and day to day working.

“The learning process is very interactive and gets everyone involved. PRI Training Instructors make sure that every attendee understands every part of the scope presented. As the industry is continually changing, with new requirements, it is advantageous to ensure all employees are kept up to date with these changes, to ensure they are complying with the requirements. The training can also be seen as a refresher. It represents a good

opportunity for off-site employees to do some networking too and maintain relations with industry experts via PRI Training.

“Onsite training benefited the company in many ways. Relationships between colleagues have improved as there is a better understanding for how different individuals work. Some employees have a more thorough focus on procedures, whilst others are focus on production output in the quickest time possible.

“It was a pleasure to work with the PRI Training team, the communication was excellent, and they were very helpful with logistical details. We received very good feedback from our employees, who enjoyed the training courses and were able to directly apply the knowledge gained in their daily work. We would recommend PRI Training to companies wanting to get up to date Nadcap & quality training for their employees.”

For more information on PRI Training’s professional development options and courses available, please contact us at PRI-Training@p-r-i.org or visit our [website](#) for our [public schedule](#), [onsite training session](#) or [webinar training](#).

“The course was very informative, I now have greater confidence in my role”
Introduction to Pyrometry, April 2019

“This course is a very good learning tool and I have gained experience going forward”. *Nadcap Audit Criteria Review – Chemical Processing, July 2019*

2020 Beijing, China Nadcap Meeting Training Opportunities

Course Title	Course Summary (all taught in English and Chinese)	When	Cost
Nadcap Audit Criteria Review: Non Destructive Testing	This course is designed to provide a complete overview of Nadcap requirements related to the NDT audit and is conducted by experienced instructors. All instructors are experts in Nadcap NDT requirements. <ul style="list-style-type: none"> • Present the structure and format of a Nadcap NDT audit • Assure an understanding of the content and intent of all sections of each AC7114 Audit Criteria series used during a NDT audit 	February 25-26-27 (9:00am- 6:00pm)	\$750 USD
Effective Aerospace Outsourcing	This course will be useful to companies seeking ISO 9001, AC7004, 9100 and Nadcap accreditation. For accredited companies the course will facilitate continual improvement on these subjects. The course content will be applicable to staff involved with quality assurance and control, vendor compliance, purchasing and production planning.	February 25 (8:00am-12:00pm)	\$50 USD
Internal Auditing Systems Overview	This course assists in the process of building an internal audit system and how to structure the key elements of the system for success while also explaining the vital relationship between Quality and Management.	February 25 (1:00pm-6:00pm)	\$50 USD
Contract Review	This shows Contract Review as a multi-disciplinary process which should ensure that all potential problems are identified and addressed before any commitment to supply is made. This course describes what must be done. The requirements are explained and illustrated by discussions around common problems and weaknesses. Participants will receive a certificate of completion.	February 26 (9:00am-6:00pm)	\$50 USD
Penetrant Testing and Magnetic Testing Self-Audit Risk Assessment	This is designed for reviewing the potential failure modes of some of the most common findings associated with penetrant and magnetic particle audit criteria, and the associated NDT quality system questions in AC7114. This is a dynamic course focusing on predicting the failure modes of common findings starting from AC7114, through AC7114/1 and AC7114/2. The course content will briefly highlight some of the most common findings documented within the past year to eighteen months.	February 27 (10:30am- 6:00pm)	\$50 USD

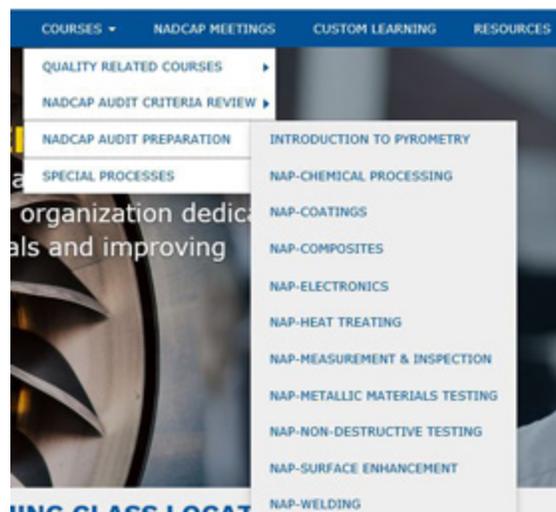
Registration for PRI Training courses offered during the February 2020 Beijing, China Nadcap Meeting is now open. Registration can be completed on the [PRI Training website](#) or by email to Sharron Song ssong@p-r-i.org. All courses will be conducted by PRI Training Instructors in English and translated into Mandarin.

Our New Website

We are excited to unveil our redesigned [website](#). The new website has a fresh modern feel designed to provide a better customer experience, including mobile friendly capabilities. New enhancements include the “Courses” drop down option, a transcript page for trainings, improved personal email receipt recovery, Course Outlines page, improved license activation, and enhanced resource center. All email communication, including purchase receipts, can be accessed directly by going to the “My Notifications” tab.



On the redesigned website, the “Courses” drop down can be used to search for a specific course. Please note that you need to be logged in to have access to the registration button.



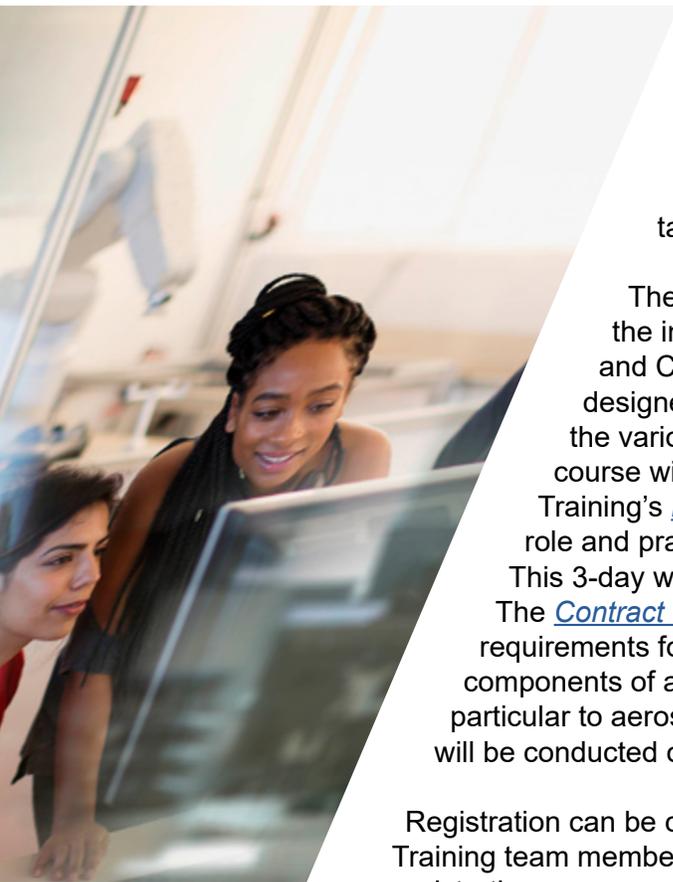
A complete list of all PRI Training courses and summaries can be accessed from the PRI Training home page by clicking on “view outlines”.

All course transcripts are now available by clicking on the Webinar Drop Down and selecting “Print Certificate/Transcripts”.

PRI Training offers a multiple purchase or purchasing for another user option for the convenience of our customers. If multiple registrations are purchased, the license key needs to be activated. The license activation link is now available on the America and Europe schedule page. Please note you must be logged in to activate the license key.

We hope you enjoy the new design and layout. Please contact the [PRI Training](#) team if you have any additional question regarding courses or registration.

New Webinars in 2020



We are excited to offer new webinar training options in 2020. In addition to the 3-hour quality and heat treat webinars, we will now offer a select few of our full day, 8-hour courses as webinars. These courses include Process FMEA, Contract Review for Aerospace Suppliers, and our new Nadcap & Quality for Procurement course. These full day courses will be taught in 2.5-hour sessions over a three-day span.

The new [Nadcap & Quality for Procurement](#) course is aimed at the individuals who are responsible for the various Purchasing and Contract Review functions in their organization. This course is designed to provide you with the necessary knowledge to comprehend the various quality functions imposed by 9100 and Nadcap. This new course will launch on March 24-26, 2020 from 11:00am- 1:30pm EST. PRI Training's [Process FMEA](#) course provides a thorough understanding of the role and practices around PFMEA and explains the components of PFMEA. This 3-day webinar will be taught July 21-23, 2020 from 1:00pm-3:30pm EST. The [Contract Review for Aerospace Suppliers](#) course aims to clarify the requirements for Contract Review in the aerospace sector, present the components of a Contract Review system, and explain technical requirements particular to aerospace. The Contract Review for Aerospace Suppliers, full course will be conducted on August 25-27, 2020 from 10:00am-12:30pm EST.

Registration can be completed on the [PRI Training website](#). Please [contact](#) a PRI Training team member if you have any questions or would like assistance with registration.



PRI Training is on [LinkedIn](#).

Please follow us to keep up-to-date with our news and benefit from bonus content.

Here's what we've been talking about recently...

A screenshot of a LinkedIn post from the page "PRI Training". The post shows the profile name "PRI Training" with 442 followers and a post from 1 week ago. The text of the post reads: "The evolution of Electronics is an article written by the PRI training instructors & Nadcap ETG auditor [Don Grimley](#). It covers the evolution of the Nadcap Electronic task group since 1960. Download it for free 📄". There is a "...see more" link at the bottom right of the post.A screenshot of a LinkedIn post from the page "PRI Training". The post shows the profile name "PRI Training" with 442 followers and a post from 2 weeks ago. The text of the post reads: "This downloadable & free Nadcap Audit Preparation Timeline whitepaper can help you to prepare for your upcoming [#nadcapaudit](#)". There is a "...see more" link at the bottom right of the post. Below the text is a partial image of a jet engine fan.

Meet the Instructor

Thomas Rücker

MY NAME IS THOMAS RÜCKER. I HAVE BEEN A PRI HEAT TREATING INSTRUCTOR SINCE 2014, TEACHING INTRODUCTION TO PYROMETRY, NADCAP AUDIT PREPARATION, RCCA AND CONTRACT REVIEW COURSES IN BOTH ENGLISH AND GERMAN. I HAVE MORE THAN 20 YEARS OF EXPERIENCE IN THE AEROSPACE INDUSTRY. I HAVE ALSO SPECIALIZED IN INSTRUMENTATION INCLUDING HEAT TREATING CONCEPTS.



I used my experience in sensor and instrumentation calibration to build a calibration laboratory in Limburg, Germany, which was accredited by DAkkS (the national standard in Germany).

I am currently a Business Development Manager Heat Treatment for EUROTHERM, which is located in Germany. My job requires me to work very close with furnace builders, as well as, end users in the aerospace industry. It is crucial that I am aware of the most current heat treatment specifications such as AMS2750.

I decided to become a PRI Training Instructor after speaking with the PRI Training team at the Europe Nadcap Meetings. There was a need for a German-speaking specialist for Heat Treat, and I was happy to add instructor to my skills.

I am a science-fiction fan and I love MARVEL movies. The real fun fact about me is that I am the chairman in a roller skating and figure skating club and the president for figure skating and ice hockey in the state of Rheinland-Pfalz.

Please join me in my upcoming [Introduction to Pyrometry](#) training and [Root Cause Corrective Action](#) session in [Hamburg, Germany](#) 16-18 March 2020.

Onsite Training

ONSITE TRAINING IS A PERFECT OPPORTUNITY TO RECEIVE TRAINING THAT FITS YOUR COMPANY'S SPECIFIC NEEDS AND BUDGET.

Our instructors are subject matter experts who assure your learning experience is a success. All PRI Training special process and quality courses are available for onsite training.

Onsite training offers great perks:

- Reduce time out of the office as the training comes to you
- Choose the date that works best for your company
- Ask your questions to an expert instructor in a confidential environment

[Visit our website](#) for a complete list of courses. [Contact a team member](#) to answer any questions or to book your onsite training today.

What do you want to read about?

The intent of the PRI Training newsletter is to provide timely, valuable and interesting content to support the Nadcap community to continually improve their operations.

If there is a specific topic you would like to read about, please tell us via email to PRI-Training@p-r-i.org



PRI Training Membership

Membership is a prestigious association with an international organization dedicated to developing quality professionals and improving special process technical skills. Membership is a powerful and efficient way to support the need for continuous staff development and improved productivity.

Membership is available for anyone interested in advancing their learning in the quality or special process field. If you are a quality manager, engineer, or employee in any department related to quality or special processes, there is a PRI Training membership level to help you and your company meet your educational goals.

PRI Training Membership provides a way for both companies and individuals to achieve their professional development goals.

Benefits of Membership

- Allow companies to invest in staff development
- Provide customized benefits and options
- Offer increased levels of service
- Generous discounts and preferential rates

[Learn more](#)

Our Team

If you are registered to attend the Nadcap meeting in Beijing, China in February 2020 please visit the PRI Training Helpdesk to discuss public, hosting or onsite training opportunities with the team.



MICHELE STEFANCHIK
MANAGER



CRYSTAL KURTYKA
SPECIALIST

For any additional questions regarding training, please contact a PRI Training team member at PRI-Training@p-r-i.org or visit our website www.PRI-Training.com



STACEY ALLAN
COORDINATOR



CELIA ALVAREZ RAMOS
ADMINISTRATOR



STEPHANIE LABOURDIQUE
COORDINATOR



PRISM *Training*



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